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EXAMINER

CHAU, COREY P

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/757,012

Applicant(s)

AMIR ET AL.

Examiner

Corey P Chau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-16,20 and 22-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-16 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,20 and 22-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Claims 1-2, 4-16, 20 and 22-29 in the reply filed on 2/14/04 is acknowledged.

***Response to Amendment***

2. The declaration filed on April 20, 2004 under 37 CFR 1.131 has been considered but is ineffective to overcome the Shim (US 2002/0068537) reference.

The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Shim reference to either a constructive reduction to practice or an actual reduction to practice. A general allegation that the invention completed prior to the date of the reference is not sufficient. A declaration by the inventor to the effect that his or her invention was conceived or reduced to practice prior to the reference date, without a statement of facts demonstrating the correctness of this conclusion, is insufficient to satisfy 37 CFR 1.131. 37 CFR 1.131(b) requires that original exhibits of drawings or records, or photocopies thereof, accompany and form part of the affidavit or declaration or their absence satisfactorily explained. For additional information, see MPEP § 715.07. Furthermore, the entire period of diligence must be accounted for. A statement that the subject matter was "diligent in reducing the invention to practice at least from a time prior to December 4, 2000" is not a showing but a mere pleading. Diligence requires that applicants must be specific as to dates and facts. The period during which diligence is required must be accounted for by either

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affirmative acts or acceptable excuses. The IBM Invention Disclosure form was dated as being created on March 28, 2000 and modified April 5, 2000, however there is a period of no activity from April 5, 2000 to the effective date of December 4, 2000 to Shim.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 24 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed, does not support the limitations of "non-lens source" as claimed in claim 24 now.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding Claim 25, which depends on Claim 24 discloses the source is a video camera. It is unclear to the examiner how a source that is a video camera can be a non-lens source. Claim 25 is contradicting to Claim 24.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 2, 4, 5, 8, 20, 22, 23, 24, 25, 26, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5477270 to Park.

9. Regarding Claim 1, Park discloses a computer-implemented method (i.e. microcomputer) for generating a gain adjust signal to establish an audio output level (i.e. camcorders including a function wherein the audio amplitude changes in a proportion to change in magnification of the zoom lens, i.e., a sound receiving function having a unified image and sound qualities) (Fig. 1; column 1, lines 31-35), comprising: receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (i.e. microphones are disposed on the camcorder. microcomputer 21 receives a wide/tele signal, which signal changes depending on the position of the zoom lens in the camera section, and microcomputer 21 outputs the controls signal according to wide/tele signal so as to represent the distance from the sound source)(Fig. 1; column 1; lines 61-66); determining a gain adjust signal based at

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least in part on the person-microphone position signal (i.e. the outputs of the amplifiers 13, 14, and 15 are input to the relevant electronic volume controls 16, 17, and 18, and are adjusted according to the control signal)(Fig. 2; Table 1; column 1, line 61 to column 2, line 14); and using the gain adjust signal to establish the audio output level (i.e. audio signals are adjusted appropriately in the electronic volume controls in accordance with the control signal produced by the microcomputer, therefore producing a life-like audio output)(column 1, lines 46-60), wherein the gain adjust signal is determined based at least partially on at least one of: a distance from a person's mouth to a microphone, an orientation of a person's head relative to the microphone, and a head location relative to a direction of sensitivity of a microphone (i.e. the output voltage, having one of eight steps and producing a change in the electronic volume associated with the recorded image, wherein the recorded image used to adjust the wide/tele signal is a person and it is inherent that a person has a mouth and a head. The microphones are disposed on the camcorder and the wide/tele signal is adjusted using the camcorder a reference point, therefore a distance from a person's mouth to a microphone).

10. Regarding Claim 2, Park discloses the person-microphone position signal (i.e. a wide/tele signal, which signal changes depending on the position of the zoom lens in the camera section, and microcomputer 21 outputs the control signal according to wide/tele signal so as to represent the distance from the sound source) is derived from a video system.

11. Regarding Claim 4, Park discloses recording at least one calibration person-microphone position signal; recording at least one calibration audio level (i.e. a

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camcorder that records a unified image and sound quality)(column 1, lines 31-37); and using the calibration signal and calibration level, generating at least one mapping (i.e. translating the wide/tele signal into eight steps according to the position of the conventional zoom lens. The output voltage, having one of eight steps and producing a change in the electronic volume associated with the recorded image)(Fig. 2; Table 1; column 2, lines 2-46).

12. Regarding Claim 5, Park discloses using the mapping to generate at least one gain adjust signal based on at least one person-microphone position signal (Fig. 2 Table 1; column 2, lines 2-46).

13. Regarding Claim 8, Park discloses the gain adjust signal is determined contemporaneously with a recording of the person (column 1, line 61 to column 2, line 46).

14. Regarding Claim 20, Park discloses an audio system (Fig. 1), comprising: at least one microphone (10,11,12) electrically connected to at least one audio amplifier (13,14,15,16,17,18) having at least one audio gain (column 1, lines 46-60); at least one video camera (i.e. camcorder)(Fig. 1); and at least one processor (21) receiving signals from the video camera (i.e. wide/tele signal) and establishing the audio gain in response thereto (i.e. microcomputer 21 receives a wide/tele signal, which signal changes depending on the position of the zoom lens in the camera section, and microcomputer 21 outputs the control signal according to the wide/tele signal so as to represent the distance from the sound source. Therefore, the outputs of amplifiers 13, 14, and 15 are input to the relevant electronic volume controls 16, 17, and 18, and are adjusted

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according to the control signal)(column 1, line 46 to column 2, line 46), wherein the processor determines a gain adjust signal based at least partially on (column 2, lines 2-46): a distance from a person's mouth to a microphone as determined from the video camera signals, or an orientation of a person's head relative to the microphone as determined from the video camera signals (i.e. the output voltage, having one of eight steps and producing a change in the electronic volume associated with the recorded image, wherein the recorded image used to adjust the wide/tele signal is a person and it is inherent that a person has a mouth and a head. The microphones are disposed on the camcorder and the wide/tele signal is adjusted using the camcorder a reference point, therefore a distance from a person's mouth to a microphone).

15. Regarding Claim 22, Park discloses the processor records at least one calibration person-microphone position signal and at least calibration one audio level (i.e. a camcorder that records a unified image and sound quality) (column 1, lines 31-37), and uses the calibration signal and calibration level to generate at least one mapping useful in generating the gain adjust signal (i.e. translating the wide/tele signal into eight steps according to the position of the conventional zoom lens. The output voltage, having one of eight steps and producing a change in the electronic volume associated with the recorded image) (Fig. 2; Table 1; column 2, lines 2-46).

16. Regarding Claim 23, Park discloses a slow adjust filter using an audio stream to generate a slow gain adjust signal (i.e. electronic volume controls that receives an audio stream from the amplifier and adjust the gain of the audio signal)(Fig. 1).



17. Regarding Claim 24, a best understood with regarding the 112, 1<sup>st</sup> problem as mention above, Park discloses an audio system (Fig. 1), comprising: at least one microphone (10,11,12) electrically connected to at least one audio amplifier (13,14,15,16,17,18) having at least one audio gain (column 1, lines 46-60); at least one source of person-microphone position signals (i.e. wide/tele signal)(column 1, line 61 to column 2, line 14); and at least one processor (21) receiving signals from the source (i.e. wide/tele signal) (Fig. 1) and establishing the audio gain in response thereto (i.e. microcomputer 21 receives a wide/tele signal, which signal changes depending on the position of the zoom lens in the camera section, and microcomputer 21 outputs the control signal according to the wide/tele signal so as to represent the distance from the sound source. Therefore, the outputs of amplifiers 13, 14, and 15 are input to the relevant electronic volume controls 16, 17, and 18, and are adjusted according to the control signal)(column 1, line 46 to column 2, line 46).

18. Regarding Claim 25, Fig 1 discloses the source is a video camera (i.e. a wide/tele signal, which signal changes depending on the position of the zoom lens in the camera section) (column 1, lines 61-66).

19. Regarding Claim 26, Fig. discloses the source is a motion sensing system of a laser system or a position sensing system or an orientation sensing system or a distance sensing system (i.e. a wide/tele signal representative of a distance from a sound source)(Fig. 2; Table 1; column 1, line 61 to column 2, line 15).

20. Regarding Claim 27, Park discloses a slow adjust filter using an audio stream to generate a slow gain adjust signal (i.e. electronic volume controls that receives an audio stream from the amplifier and adjust the gain of the audio signal)(Fig. 1).

21. Claims 1, 2, 6, 20, and 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6600824 to Matsuo.

22. Regarding Claim 1, Matsuo discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Fig. 14), comprising: receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (i.e. the distance to the sound source is detected by performing image information processing based on an image captured by a camera)(Fig. 14, reference 71,72; column 18, lines 6-30); determining a gain adjust signal based at least in part on the person-microphone position signal (72)(i.e. gain calculating part)(column 18, lines 18-61); and using the gain adjust signal to establish the audio output level (73a-c)(Fig. 14; column 18, lines 18-30), wherein the gain adjust signal is determined based at least partially on at least one of: a distance from a person's mouth to a microphone, an orientation of a person's head relative to the microphone, and a head location relative to a direction of sensitivity of a microphone (i.e. various of techniques for image processing to detect the distance are known, and for example, a method of measuring a face area can be used).

23. Regarding Claim 2, Matsuo discloses the person-microphone position signal is derived from a video system (i.e. the distance to the sound source is detected by

performing image information processing based on an image captured by a camera)(column 18, lines 18-30).

24. Regarding Claim 6, Matsuo discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Fig. 14), comprising: receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (i.e. the distance to the sound source is detected by performing image information processing based on an image captured by a camera)(Fig. 14, reference 71,72; column 18, lines 6-30); determining a gain adjust signal based at least in part on the person-microphone position signal (72)(i.e. gain calculating part)(column 18, lines 18-61); and using the gain adjust signal to establish the audio output level (73a-c)(Fig. 14; column 18, lines 18-30), wherein the person-microphone position signal is derived from a motion sensing system or a position sensing system or an orientation sensing system or a distance sensing system (i.e. various of techniques for image processing to detect the distance are known, and for example, a method of measuring a face area can be used).

25. Regarding Claim 20, Matsuo discloses an audio system (Fig. 14), comprising: at least one microphone (10e-f) electrically connected to at least one audio amplifier (73a-c) having at least one audio gain (column 18, lines 18-61); at least one video camera (70); and at least one processor (71,72) receiving signals from the video camera (i.e. the distance to the sound source is detected by performing image information processing based on an image captured by a camera) and establishing the audio gain in response thereto (Fig. 15; column 18, lines 18-30), wherein the processor determines

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a gain adjust signal based at least partially on: a distance from a person's mouth to a microphone as determined from the video camera signals, or an orientation of a person's head relative to the microphone as determined from the video camera signals (i.e. various of techniques for image processing to detect the distance are known, and for example, a method of measuring a face area can be used).

26. Regarding Claim 24, a best understood with regarding the 112, 1<sup>st</sup> problem as mention above, Matsuo disclose an audio system, comprising: at least one microphone (10e-f) electrically connected to at least one audio amplifier (73a-c) having at least one audio gain (column 18, lines 18-61); at least one source of person-microphone position signals (i.e. the distance to the sound source is detected by performing image information processing based on an image captured by a camera); and at least one processor (71,72) receiving signals from the source (i.e. the distance to the sound source is detected by performing image information processing based on an image captured by a camera) and establishing the audio gain in response thereto (Fig. 15; column 18, lines 18-30).

27. Regarding Claim 25, Matsuo discloses the source is a video camera (i.e. the distance to the sound source is detected by performing image information processing based on an image captured by a camera)(column 18, lines 18-30).

28. Regarding Claim 26, Matsuo discloses the source is a motion sensing system of a laser system or a position sensing system or an orientation sensing system or a distance sensing system (i.e. the distance to the sound source is detected by

performing image information processing based on an image captured by a camera)(column 18, lines 18-30).

29. Claims 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. US 2002/0068537 to Shim et al. (hereafter as Shim).

30. Regarding Claim 6, Shim discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Fig. 7), comprising: receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (i.e. one or more distance sensors on a radiotelephone to estimate a distance between the sensor and some portion of the user or user's head)(Figs. 7 and 8); determining a gain adjust signal based at least in part on the person-microphone position signal (i.e. using signals from one or more proximity sensors associated with the radiotelephone device, the device determines if a radiotelephone user is within a selected proximity zone for the device. If the user is within the proximity zone, the system adjust the speaker volume control and/or the microphone gain control according to an estimated user-device distance)(abstract); and using the gain adjust signal to establish the audio output level, wherein the person-microphone position signal is derived from a motion sensing system or a position sensing system or an orientation sensing system or a distance sensing system (i.e. the distance sensors include, but are not limited to, an infrared sensor, a photoelectric sensor, a sound reflection sensor, a capacitive sensor, and a temperature sensor)(page 1, paragraph 0005).

31. Regarding Claim 7, Shim discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Fig. 7), comprising: receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (i.e. one or more distance sensors on a radiotelephone to estimate a distance between the sensor and some portion of the user or user's head)(Figs. 7 and 8); determining a gain adjust signal based at least in part on the person-microphone position signal (i.e. using signals from one or more proximity sensors associated with the radiotelephone device, the device determines if a radiotelephone user is within a selected proximity zone for the device. If the user is within the proximity zone, the system adjust the speaker volume control and/or the microphone gain control according to an estimated user-device distance)(abstract); and using the gain adjust signal to establish the audio output level, wherein the person-microphone position signal is derived from a laser system (i.e. the distance sensors include, but are not limited to, an infrared sensor, a photoelectric sensor, a sound reflection sensor, a capacitive sensor, and a temperature sensor)(page 1, paragraph 0005).

32. Claims 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 05-183621 to Hisaki.

33. Regarding Claim 6, Hisaki discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Fig. 2), comprising: receiving at least one person-microphone position signal representative of a position of

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a person relative to a microphone (i.e. measuring a distance between the transmitter and/or the receiver and a human body with a distance sensor)(abstract; page 2, paragraph 0017); determining a gain adjust signal based at least in part on the person-microphone position signal; and using the gain adjust signal to establish the audio output level (i.e. controlling the sound volume of the receiver or the input sensitivity of the transmitter in the response to the result of the measurement with a sound volume controller and/or an input sensitivity controller)(abstract; page 2, paragraphs 0016-0020), wherein the person-microphone position signal is derived from a motion sensing system or a position sensing system or an orientation sensing system or a distance sensing system (i.e. infrared sensor 7)(page 2, paragraph 0015).

34. Regarding Claim 7, Hisaki discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Fig. 2), comprising: receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (i.e. measuring a distance between the transmitter and/or the receiver and a human body with a distance sensor)(abstract; page 2, paragraph 0017); determining a gain adjust signal based at least in part on the person-microphone position signal; and using the gain adjust signal to establish the audio output level (i.e. controlling the sound volume of the receiver or the input sensitivity of the transmitter in the response to the result of the measurement with a sound volume controller and/or an input sensitivity controller)(abstract; page 2, paragraphs 0016-0020), wherein the person-microphone position signal is derived from a laser system

(i.e. infrared sensor 7)(page 2, paragraph 0015; page 3, paragraph 0025).

***Claim Rejections - 35 USC § 103***

35. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

36. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5477270 to Park in view of U.S. Patent No. 4807051 to Ogura.

37. Park discloses a camcorder with a conventional microphone that includes a central microphone, left microphone, and a right microphone. Park does not have plurality of microphone to have a gain adjust signal determined by selecting one of several microphone output based on head position. Ogura discloses a video camera having one microphone disposed in the front of the camera and another microphone disposed in the rear of the camera that automatically changed from one over to the other according to the object distance. The sensitivity of the microphone is adjusted according to the object distance, so that the sounds of an object to be photographed can be clearly recorded even in the event of a long object distance. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the camcorder of Park with the teaching Ogura to have one microphone disposed at the front disposed in the front of the camera and another microphone



disposed in the rear of the camera that automatically changed from one over to the other according to the object (i.e. head) distance. The sensitivity (i.e. volume controls) of the microphone is adjusted according to the object distance, so that the sounds of an object to be photographed can be clearly recorded even in the event of a long object distance (i.e. gain adjust signal determined by selecting one of several microphone output based on head position) (Fig. 1, reference 4 and 5; Figs. 3a, 3b, 4a, 4b, 5a, and 5b; column 1, lines 46-55; column 2, lines 52-65; column 3, lines 23-56; column 7, line 63 through column 8, line 16).

38. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5477270 to Park in view of U.S. Patent No. 6421064 to Lemelson et al (hereafter as Lemelson).

39. Park discloses all elements of Claim 29 except for an illumination-based pupil detector or a face detector. Lemelson discloses an eye tracking apparatus using a low power infrared laser or LED to provide and place a glint on the person's eye to enhance finding the center of the person's eye. The low power infrared laser or LED is couple to optics and the optics is couple to a camera. The camera is used to provided images of the head and the eye of a person, a zoom lens coupled to the camera for focusing the camera at the person, and optic coupled to the camera for aiding the camera in detecting or providing images of the head and eye of the person (Fig. 3C, references 26, 76, and 77; column 12, lines 31-36; column 4, lines 14-23 and lines 48-53).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

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the invention was made to modify the camcorder of Park with the teaching Lemelson to incorporate the eye tracking apparatus to the camcorder to provide and place a glint on the person's eye to enhance finding the center of the person's eye which will zoom the camcorder.

### ***Response to Arguments***

40. Applicant's arguments filed April 20, 2004 have been fully considered but they are not persuasive.

41. With respect to the applicant's arguments on page 10, stating that, "The Office Action is defective because it continues to equate Park's lens position with the recitation in Claim 1 of the distance from a person's mouth to microphone, orientation of a person's head relative to the microphone, or head location relative to a direction of sensitivity of a microphone" and further stating that "a lens position is not a distance or an orientation or a head location. It is simply a lens position. It is established by the manual action of a user and it can bear absolutely no relation to anything. Certainly, there is no mention in Park that the lens position be adjusted for the distance to a person's mouth, or for the orientation or position of a person's head", have been noted. The Examiner however respectfully disagrees. Specifically Park discloses **"the central audio input signal is increased when the position of the zoom lens in Fig. 2 goes from "wide" to "tele" (which means that the distance received to the subject is shortened) while the level of the central audio input signal decreased when the position of the zoom lens in Fig. 2 goes from "tele" to "wide" (which means that**

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**the distance to the subject is decreased**). For example, the human voice is loud when the position of the zoom lens goes from "wide" to "tele" and is soft when the position of the zoom lens goes from "tele" to "wide"., which clearly shows the lens bears relation to the distance to the subject (i.e. person). See column 2, lines 15-46.

Furthermore, Park discloses that general video camera and recorder (camcorder) includes an optical lens with a zoom function, which lens selectively produces a life-like video image for recording. However the audio section of the general camcorder consists of a general purpose microphone which lacks the capability to produce a life-like sound level. Accordingly, the viewer's visual and aural perception become mismatched since the visual distance from a camcorder to the subject changes for the image while the sound does not change in correspondence with a change in image size, i.e., with the change in apparent distance between the subject and the camcorder. Therefore to overcome this problem Park discloses **a camcorder including a function wherein the audio amplitude changes in proportion to the change in magnification of the zoom lens**, wherein the sound changes in correspondence with a change in image size, i.e., with the change in apparent distance between the subject and the camcorder. The microcomputer 21 receives a wide/tele signal, which signal changes depending on the position of the zoom lens in the camera section, and microcomputer 21 outputs the control signal according to the wide/tele signal so as to represent the distance from the sound source. Therefore, the outputs of the amplifiers 13, 14, and 15 are input to the relevant electronic volume controls 16, 17, and 18, and are adjusted according to the control signal. Therefore providing a unified image and sound qualities, wherein the

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electronic volume control adjust the sound corresponding to **the wide/tele signal that changes according to the distance of the sound source**. See column 1, line 17 to column 2 line 46. Therefore the wide/tele signal, which changes depending on the position of the zoom lens does bare relation to the distance because a person operating the camcorder will manually adjust the zoom lens to focus on the subject, wherein the subject is a person. It is inherent that a person has a mouth and a head, therefore a focus point could be a person's head or person's mouth, however focus on a person in itself is at the same distance to the person's head or person's mouth. The microphones are disposed on the camcorder and the wide/tele signal is adjusted using the camcorder a reference point, therefore a distance from a person's mouth to a microphone.

Regarding Applicant's arguments that this process is done manually, the limitations as recited in Claim 1 does not limit the operation to a process that is automated. The applicant does not disclose such limitation in the claim as to how the signal is acquired or if an automatic operation is utilized to acquire a person microphone position signal.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

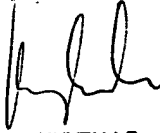
***Conclusion***

42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey P Chau whose telephone number is (703)305-0683. The examiner can normally be reached on Monday - Friday 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on (703)305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 10, 2005

  
HUYEN LE  
PRIMARY EXAMINER